

Report to Congressional Requesters

October 1993

U.S. TRADE AND DEVELOPMENT AGENCY

Limitations Exist in its Ability to Help Generate U.S. Exports



RESTRICTED--Not to be released outside the General Accounting Office unless specifically approved by the Office of Congressional Relations.



United States General Accounting Office Washington, D.C. 20548

General Government Division

B-254142

October 20, 1993

The Honorable William F. Clinger, Jr. Ranking Minority Member Committee on Government Operations

The Honorable John M. Spratt, Jr.
Chairman, Subcommittee on Commerce, Consumer, and
Monetary Affairs
House of Representatives

As requested, we examined the U.S. Trade and Development Agency (TDA) to determine (1) how its activities may help lead to increased U.S. exports, (2) what factors affect its ability to help generate U.S. exports, and (3) how five other countries approach major development projects abroad that may help increase their exports.

As requested, unless you release this report earlier, we plan no further distribution of this report until 30 days after its issue date. At that time, we will send copies to the Director of the Trade and Development Agency; the heads of all agencies represented on the Trade Promotion Coordinating Committee; and embassy officials from the governments of France, Germany, Italy, Japan, and the United Kingdom. We will also make copies available to other interested parties on request.

Please contact me at (202) 512-4812 if you or your staff have any questions concerning this report. The major contributors to this report are listed in the appendix.

Allan I. Mendelowitz, Managing Director International Trade, Finance,

allan R. Mendelowitz

and Competitiveness

Executive Summary

Purpose

Major development projects overseas represent export potential for U.S. exporters because such projects generally use imported capital goods and incorporate a high level of technology. To help promote economic development in and the export of U.S. goods and services to developing and middle-income countries, in 1980 Congress created the U.S. Trade and Development Agency (TDA), which was known as the Trade Development Program until 1992.

The former Ranking Minority Member of the House Committee on Government Operations and the former Chairman of its Subcommittee on Commerce, Consumer, and Monetary Affairs asked GAO to review TDA's efforts to promote the export of U.S. goods and services. Specifically, in this report, GAO discusses (1) how TDA's activities may help lead to increased U.S. exports, (2) what factors affect TDA's ability to help generate U.S. exports, and (3) how five other countries approach major development projects abroad that may help increase their exports.

Background

TDA is administered under the authority of section 661 of the Foreign Assistance Act of 1961, as amended (22 U.S.C. 2421). The Jobs Through Exports Act of 1992 established TDA as an independent agency under the foreign policy guidance of the Secretary of State. TDA is authorized to help U.S. companies compete for major development projects overseas by funding project-related planning activities. These activities include feasibility studies, architectural and engineering design activities, training, orientation visits, and technical symposia. TDA bases its funding of these activities on the premise that if a U.S. firm performs a feasibility study or other planning activities, then U.S. firms will be in a more competitive position to win procurement and construction contracts when a project is finally implemented—which can occur several years later. To qualify for TDA funding, potential projects must represent a development priority for the host country, project financing must be identified and likely to occur, the potential for U.S. exports must be significant during project implementation, and foreign government-supported competition must be present. Between fiscal years 1982 and 1993, TDA's budget increased from \$7 million to \$40 million, or 471 percent in nominal dollars.

Results in Brief

TDA seeks to help U.S. firms compete in markets overseas by funding various project planning activities. Since its inception, over 850 firms have participated in TDA-funded activities. From 1982 through 1992, TDA estimates that its activities helped generate \$3.8 billion in exports. This

amount translates to \$25 of exports for each \$1 of assistance provided by TDA. Although GAO verified some of the company-provided export data, GAO noted that it is difficult to determine if these exports would have occurred without TDA's activities. TDA guidelines state that individual projects should have the potential to generate \$50 to \$100 in export dollars for each \$1 of assistance.

Several factors limit TDA's capability to help U.S. companies generate exports. TDA plays a limited and indirect role in the major development project process, such as its involvement primarily in the initial feasibility rather than the architectural and engineering design phase. In addition, TDA depends on services provided by other U.S. government organizations to help it generate exports. These services include overseas representation and support by the Department of Commerce, financing by the U.S. Export-Import Bank (Eximbank), and specialized activities offered by other U.S. government agencies.

In contrast to the United States, five other countries that GAO studied—France, Germany, Italy, Japan, and the United Kingdom—approach major development projects differently in several key respects. These countries use more of their foreign aid resources to fund major development projects. In addition, most of these countries use a more integrated approach to identifying and funding projects, such as combining traditional export financing with foreign aid to obtain commercial benefits from major projects.

Principal Findings

Many U.S. Firms Have Participated in TDA's Activities

TDA has reported that since 1980 over 850 U.S. firms have participated in its activities. Some firms have since won other contracts and generated U.S. exports. For example, some U.S. companies have obtained contracts for follow-on work, such as architectural and engineering design, project management during the construction phase, and spin-off work on unrelated projects.

Although some TDA-supported major development projects have produced U.S. exports, most projects have to date generated fewer exports than TDA's original assessment. For example, TDA forecasted that its funding of 682 major project planning activities from 1982 through 1992 had the

Executive Summary

potential to generate over \$19 billion in U.S. exports. The agency reported \$3.8 billion in exports, or \$25 for each \$1 of assistance provided by TDA over these 10 years, rather than the \$50-\$100 for each \$1 specified in TDA guidelines.

TDA officials believe that projects funded from 1982 through 1992 still have the potential to produce over \$19 billion in U.S. exports. They say that while projects may produce some exports during the early phases of the development process, many exports often come in later years. For example, a 1981 TDA-funded feasibility study in the Philippines led to initial exports of \$113 million, but it was not until 1988 that the project produced an additional \$220 million in exports. TDA also believes that planning activities, such as technical conferences, are successful even if they do not produce immediate exports: they serve as forums where exporters can establish contacts that may increase their chances of winning major contracts. Nevertheless, TDA is attempting to improve its data gathering, project monitoring, and program evaluation in order to, among other things, better determine whether its activities help increase U.S. exports.

Many Factors Impede TDA's Ability to Help Generate Exports

Chief among the factors that obstruct TDA's ability to help increase U.S. exports is the limited and indirect role that the agency plays in the long and complex process of project development. TDA's primary activity, funding the feasibility study, generally represents less than 3 percent of the total project cost and initiates a process that can take from 2 to 10 years to produce exports. TDA is expanding its project planning activities beyond the feasibility study to include elements of the architectural and engineering design phase—the phase at which procurement specifications are usually written. TDA's success in helping U.S. companies generate exports also depends on services that other U.S. government organizations provide during the project development process. TDA has no overseas staff: it relies on Commerce's U.S. and Foreign Commercial Service. In addition, Eximbank is a major source of financing for U.S. exporters and is responsible for aiding in the export of U.S. goods and services through several loans or loan guarantee programs.

The U.S. government is trying to improve the coordination of these and other agencies involved in the promotion of U.S. exports. In May 1990, the President created the Trade Promotion Coordination Committee. Further, that committee recently completed a governmentwide strategic plan for all federal export promotion programs.

Other Countries Handle Foreign Assistance Differently

While the United States is the world's largest overall donor of foreign assistance, the five other countries that GAO studied spend more of their foreign aid for major development projects than does the United States. In addition, other countries can also give their exporters a competitive advantage over U.S. exporters to the extent that their programs for major development project assistance are tied to purchases in the donor country, whereas the U.S. government generally opposes such practices. In 1991, the U.S.' total bilateral aid spent in areas that largely consist of major development projects was the lowest of the six industrialized countries GAO studied. Japan led with \$5.7 billion in spending, followed by Germany with \$1.4 billion, Italy with \$1.1 billion, France with \$882 million, and the United Kingdom with \$841 million, followed by the United States with \$658 million.

Further, most of the other five countries GAO studied use a more integrated organizational approach to enhance the commercial benefits derived from their projects. They centralize their major development project programs among fewer agencies than does the United States, or they use various means to coordinate the inputs of the different agencies involved in major development project planning.

Given both the relatively larger emphasis by other countries on major development projects and the integrated approach to fostering exports, it is unrealistic to expect TDA to achieve similar results. Within the bounds of its authority and funding levels, TDA is trying to maximize its advancement of U.S. exports by moving toward funding later and more expensive project planning activities during the architectural and engineering design phase. While TDA has taken initiatives to improve information on the exports generated by its activities, it is unclear whether information will be sufficient to evaluate the cost-effectiveness of this new strategy.

Recommendations

GAO is not making recommendations in this report.

Agency Comments

GAO discussed the contents of this report with officials from TDA, including the Acting Director. TDA generally agreed with the report's overall message and conclusions. GAO made some technical changes to the report on the basis of TDA's comments.

Contents

Executive Summary		2
Chapter 1 Introduction	TDA Resources TDA Project Planning Activities Cover a Broad Range of Regions, Countries, and Sectors Major Development Projects and TDA's Identification and	8 8 10
	Selection Process Objectives, Scope, and Methodology	17
Chapter 2 TDA's Activities May Help Increase U.S. Exports	Many U.S. Firms Participate in TDA's Project Planning Activities Most TDA-Supported Major Development Projects Have Yet to Produce U.S. Exports Export Information Difficult to Obtain TDA Taking Steps to Address Most Concerns	19 19 21 22 24
Chapter 3 TDA's Ability to Help Generate Exports Has Limitations	Factors That Hinder TDA's Ability to Further Exports Services Provided by Other U.S. Organizations Help Generate Exports TDA Expands Scope of Feasibility Studies	26 26 27 32
Chapter 4 Five Other Countries Take a More Strategic Approach to Funding Major Development Projects	Countries' Funding for Foreign Assistance Is Substantial Other Countries Allocate More Foreign Assistance to Major Development Projects Other Countries Use a More Integrated, Proactive Approach to Major Development Projects Other Countries Use Tied Aid to Bolster the Commercial Gains From Major Development Projects	34 34 35 37 41
Chapter 5 Conclusions		42
Appendix	Appendix I: Major Contributors to This Report	44
Related GAO Products		48

Contents

Tables	Table 1.1: The Number and Cost of TDA-Funded Feasibility Studies, Fiscal Years 1990-92	12
	Table 2.1: TDA-Funded Completed Projects Associated With Exports, Fiscal Years 1982-91	21
	Table 3.1: Examples of TDA-Supported Projects Lost to Foreign Competition	27
	Table 3.2: Cost Range of Major Development Project Phases as a Percent of Total Project Cost	33
	Table 4.1: Six Countries' Foreign Aid Spending, 1991	34
	Table 4.2: Six Countries' Bilateral Spending on Major Development Projects by Key Industry Sectors, 1991	37
Figures	Figure 1.1: TDA's Budget Appropriations, Fiscal Years 1982-93	9
1 igures	Figure 1.2: TDA's Funding by Project Planning Activity, Fiscal Years 1982-91	11
	Figure 1.3: TDA's Funding by Region, Fiscal Years 1982-91	13
	Figure 1.4: TDA's Funding by Top 10 Countries, Fiscal Years 1982-91	14
	Figure 1.5: Major Development Project Phases	15
	Figure 4.1: Six Countries' Bilateral Aid for Economic Infrastructure and Production Sectors, 1990	36

Abbreviations

AID	Agency for International Development
ATP	The United Kingdom's Aid and Trade Provision
DOC	U.S. Department of Commerce
DOE	U.S. Department of Energy
EPA	U.S. Environmental Protection Agency
Eximbank	The U.S. Export-Import Bank
GAO	General Accounting Office
OECD	Organization for Economic Cooperation and Development
TDA	Trade and Development Agency
TPCC	Trade Promotion Coordinating Committee
US&FCS	U.S. and Foreign Commercial Service

Introduction

The Trade and Development Agency (TDA) is an independent U.S. government agency that was established in 1980 and was known as the Trade and Development Program until 1992. Its mission is to promote economic development in, and the export of, U.S. goods and services to developing countries. The agency also operates in such middle-income countries as South Korea, Taiwan, Hong Kong, Mexico, and Turkey. TDA is authorized to fund a broad range of project planning activities relating to the host country's high-priority major development projects that provide opportunities for U.S. exporters. These projects generally use a high proportion of imported capital goods, incorporate a relatively high level of technology, and require follow-on maintenance and repairs. By funding these activities, TDA believes that it addresses the host country's development needs and helps U.S. firms compete against exporters from other industrialized countries whose governments provide assistance to their companies to help secure these contracts.

TDA's activities are authorized under the authority of section 661 of the Foreign Assistance Act of 1961, as amended (22 U.S.C. 2421). Further, TDA was established as an independent agency under the foreign policy guidance of the Secretary of State by the Jobs Through Exports Act of 1992 (P.L. 102-549).

TDA Resources

TDA allocates its budget resources to a range of program activities and to operating expenses. Figure 1.1 shows that between fiscal years 1982 and 1993, TDA's budget grew from \$7 million to \$40 million—an increase of 471 percent in nominal dollars. Operating expenditures have averaged 10 percent of total expenditures.

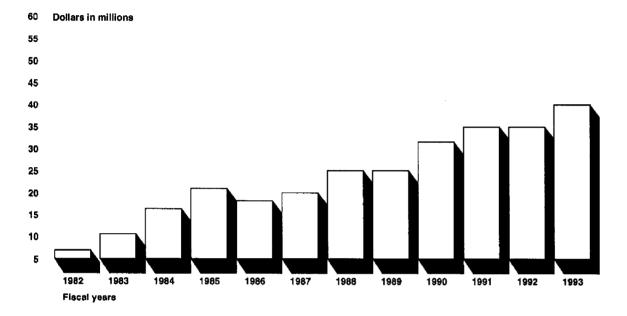
¹Before 1980, the Trade and Development Program was known as the Office of Reimbursable Development Program and operated as a component of the U.S. Agency for International Development (AID).

²The World Bank defines middle-income countries as those with a per capita gross national product of more than \$610 but less than \$7,620 as of 1990.

³Major development projects are also referred to as "infrastructure and capital projects."

⁴Major development projects typically include projects in the communications, construction, energy, manufacturing, mining, and transportation sectors.

Figure 1.1: TDA's Budget Appropriations, Fiscal Years 1982-93



Note 1: In fiscal year 1990, the appropriation was \$32 million but was reduced to \$31.5 million under the Balanced Budget and Emergency Deficit Control Act of 1985.

Note 2: The fiscal year 1992 appropriation was not enacted, TDA operated under a continuing resolution level of \$35 million.

Source: TDA.

From its Washington, D.C., headquarters, TDA manages program activities but relies on other U.S. government and private organizations to provide various support services. For example, the Department of Commerce's (DOC) U.S. and Foreign Commercial Service (US&FCS) and the Department of State provide overseas operational support; they are not reimbursed for their services. TDA also contracts out some in-house support activities to U.S. government and private organizations. For example, the Agency for International Development (AID) performs financial transactions and personnel services, and negotiates contracts over \$150,000. Private contractors provide additional support services, including program

 $^{^5}$ US&FCS is responsible for carrying out many TDA-related duties overseas. US&FCS has an overseas network of 135 posts in 69 countries.

Chapter 1 Introduction

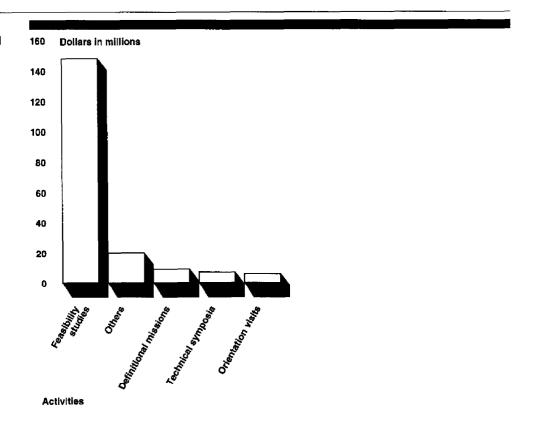
evaluation and computer support. In 1991, TDA spent \$868,438 for private contractors. As of April 30, 1993, the agency had a full-time staff of 31.6

TDA Project Planning Activities Cover a Broad Range of Regions, Countries, and Sectors TDA funds many different types of project planning activities covering a range of regions, countries, and sectors. Figure 1.2 illustrates the allocation of TDA program funds, by activity, for fiscal years 1982-91.⁷ Feasibility studies received the most funding—\$148.5 million, or over 75 percent of the agency's \$194.5-million program budget for fiscal years 1982-91.

⁶TDA is authorized a staff ceiling of 38.

⁷TDA officials stated that data for fiscal year 1981 are incomplete.

Figure 1.2: TDA's Funding by Project Planning Activity, Fiscal Years 1982-91



Note 1: "Others" includes grants to multilateral development banks, training, and technical assistance.

Note 2: "Definitional missions" refers to the prefeasibility phase of TDA's project selection process.

Source: TDA.

Table 1.1 shows the number and cost of TDA-funded feasibility studies for fiscal years 1990-92. A typical study takes 6 to 18 months to complete and costs \$150,000 to \$600,000.

İ

Table 1.1: the Number and Cost of TDA-Funded Feasibility Studies, Fiscal Years 1990-92

Fiscal year	Number of studies funded	Total obligated for studies (in millions)	Average cost per study ^a (in thousands)
1990	57	\$23	\$410
1991	66	25	381
1992	79	25	319

^aAverages computed from rounded numbers.

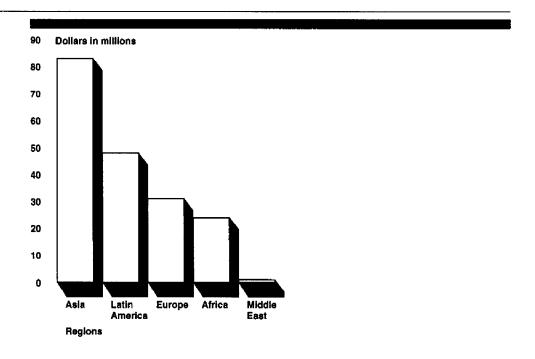
Source: Compiled from TDA data.

 $\ensuremath{\mathsf{TDA}}$ also funds other project planning-related activities to help generate U.S. exports, including

- training for host government workers and technicians on modern technologies and equipment if such assistance can improve opportunities for U.S. exporters;
- orientation visits where procurement officials from the host country travel to the United States to learn about U.S. technology and services and to observe the operation of U.S. equipment;
- technical symposia—conferences, workshops, and exhibits—to familiarize
 officials from developing and middle-income countries with U.S. goods
 and services;
- grants to multilateral development banks—including the African
 Development Bank, the European Bank for Reconstruction and
 Development, and the World Bank trust funds—to hire U.S. consultants to
 perform various project-related assignments; and
- programs to expand state and local governments' ability to provide international trade services to companies in their regions.

TDA funds project planning activities in five world geographic regions. Figure 1.3 shows TDA's funding by regions. For fiscal years 1982-91, TDA allocated more funds to activities in Asia than to other regions. Activities in Asia received \$83 million, followed by Latin America with \$47.9 million, Europe with \$31 million, and Africa with \$23.6 million. The Middle East received less than \$0.7 million.

Figure 1.3: TDA's Funding by Region, Fiscal Years 1982-91



Note: Information on obligations before fiscal year 1982 is incomplete.

Source: TDA.

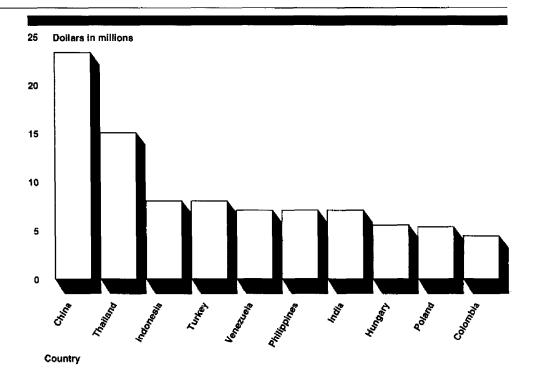
TDA also funds worldwide activities—efforts that the agency cannot allocate to one specific region or country. These activities include grants to multilateral development banks and to state and local government programs in the United States. Multilateral development banks, for example, use TDA grants to hire U.S. consultants for projects that they are considering for financing. Other countries have established similar funds to ensure that projects financed by multilateral institutions use technical specifications and standards that favor or at least do not discriminate against their companies, according to TDA's 1992 annual report. In 1992, TDA used \$2.5 million, or 6.4 percent, of its budget for this purpose. State governments and other local entities use TDA grants to expand their ability to provide international trade services to companies in their regions.

According to agency officials, TDA has no formal policy to focus on specific regions, but it does concentrate more on some regions than others. This emphasis is due to the region's potential for U.S. exports and to the U.S. government's emphasis on providing assistance to specific regions. For

example, over fiscal years 1987-91, annual funding to Latin America increased from \$1.7 million to more than \$11 million. In Eastern and Central Europe, over fiscal years 1989-91, annual funding increased from \$500,000 to \$13 million.

Within regions, TDA also places more emphasis on certain countries. For example, of the top 10 countries that received TDA funds from 1982 through 1991, the People's Republic of China and Thailand together received about 42 percent of total spending. TDA officials say that in response to congressional restrictions, the agency suspended all new activities in China in 1989 and in Thailand in 1991 but has since resumed its activities in Thailand.⁸ Figure 1.4 shows the top 10 countries in which TDA spent resources for fiscal years 1982-91. During this period, China received the most funding, \$23.3 million for 81 projects, followed by Thailand, with \$14.6 million for 49 projects.

Figure 1.4: TDA's Funding by Top 10 Countries, Fiscal Years 1982-91



Source: TDA.

⁸In fiscal year 1990, TDA provided a total of \$550,000 for two projects in China. However, the grants were used to fund existing projects and had Department of State approval.

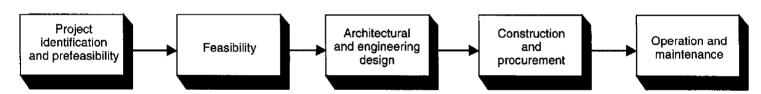
Chapter 1 Introduction

Finally, TDA funds activities in a variety of sectors. For example, the agency currently finances activities in nine sectors including agribusiness, energy and natural resources, human resources development, manufacturing, multisectors, services, telecommunications, transportation, and water and environment.

Major Development Projects and TDA's Identification and Selection Process

Major development projects vary in size and cost, but each project passes through several common phases, as shown in figure 1.5.

Figure 1.5: Major Development Project Phases



Source: TDA and World Bank.

The first phase identifies projects that have a high development priority. During this phase, TDA relies on a range of resources to identify and select projects. According to agency documents, TDA emphasizes host country participation in project identification, but other sources may also identify projects. For example, US&FCS, U.S. embassies, AID missions, and U.S. companies may identify and submit projects to TDA. However, the host government must make the formal request for funding directly to TDA or via the in-country U.S. embassy.

Also during the first phase (prefeasibility), TDA undertakes a "definitional" mission to examine the initial technical and financial issues and decide whether to continue to the next phase. As part of this process, a

⁹Multisector activities include grants to multilateral development banks and to state and local entities.

^{10&}quot;Services" include banking and insurance, tourism, and government administration.

Chapter 1 Introduction

TDA-funded assessment team, made up of technical specialists from the U.S. private sector, travels to the developing country to gather information and help local officials devise the scope of work for the feasibility study. Based on recommendations made by the team, input from the U.S. embassy, TDA's budget capability, and TDA's funding criteria, the agency determines whether to offer a grant for the feasibility study.

Funding criteria for TDA-supported feasibility studies of major development projects include the following:

- Projects must be development priorities of the host country and likely to be implemented.
- Project financing must be identified and likely to occur.
- Projects must present an opportunity for substantial sales of U.S. goods or services relative to the cost of the requested assistance (\$50 to \$100 for each \$1 invested by TDA).
- There must be the likelihood that other governments will support their companies' bids for project planning.

The second phase of project development, the feasibility phase, determines the technical, economic, and financial viability of projects in greater detail. This study may also include an assessment of market and cash flow possibilities.

Only U.S. companies may perform TDA-funded feasibility studies, according to TDA officials. The agency does not screen companies to determine if they are American. Instead, TDA relies on industry associations and individual U.S. companies to identify foreign firms that may try to obtain TDA contracts. Although the host government selects the companies, TDA approves the contract between the host country and the U.S. contractors. Finally, the agency makes payments directly to the U.S. company that is performing the contracts.

If the project is determined to be feasible, it moves to the third phase, architectural and engineering design. It is at this point that planners write specifications that may favor a particular exporting country's equipment and technology, thus setting the stage for the fourth phase: the construction and procurement of capital equipment. The final phase of project development encompasses three processes: start-up, operations, and maintenance.

¹¹The Jobs Through Exports Act of 1992 authorized TDA to fund architectural and engineering design activities. TDA recently included some elements of the design study in two of its feasibility studies.

Objectives, Scope, and Methodology

At the request of the former Ranking Minority Member of the House Government Operations Committee and the former Chairman of its Subcommittee on Commerce, Consumer, and Monetary Affairs, we examined TDA's program to determine

- · how TDA's activities may help lead to increased U.S. exports,
- · what factors affect TDA's ability to help generate U.S. exports, and
- how five other countries approach major development projects abroad that may help increase their exports.

To examine TDA's program to promote U.S. exports, we interviewed TDA officials and obtained and analyzed documents relating to TDA-funded activities. In addition, we met with U.S. government officials knowledgeable about TDA's project planning activities. These officials were from US&FCS, the Department of State, the U.S. Export-Import Bank (Eximbank), and AID. We also met with an official from the World Bank. In addition, we reviewed prior GAO reports and testimony concerning the U.S. government's approach to major development projects and private sector evaluations of major development projects. We also obtained information from representatives of various private sector organizations, including trade associations and engineering firms that have benefited from TDA grants.

Further, we obtained and analyzed information on 32 TDA-supported major development projects in three Asian countries that we visited—India, Indonesia, and Thailand. We selected these three countries because they are three of the top five countries with the greatest number of TDA projects. ¹² As of January 1992, these three countries had received TDA grants totaling \$31 million.

To review how other countries approach major development projects, we selected France, Germany, Italy, Japan, and the United Kingdom. We chose these countries because they are among our major export competitors, and they spend more on major development projects than does the United States. We focused on how much each country spends on major development projects. We also focused on the different approaches and strategies each uses to enhance the commercial benefits derived from these projects.

¹²The other two countries are the People's Republic of China (the largest recipient of TDA grants) and the Philippines. We did not conduct fieldwork in China because TDA assistance to that country has been suspended since 1989. We did not conduct fieldwork in the Philippines because of political conditions in that country.

Chapter 1 Introduction

To obtain information on these countries' major development project programs, we held discussions with U.S. officials at, and analyzed documents from, the Organization for Economic Cooperation and Development (OECD).¹³ We also obtained information from foreign officials involved in their countries' programs.

We did not assess the reliability of TDA's estimates of its overall impact on U.S. exports. The major problems with assessing the impact of TDA's activities are (1) the difficulty in isolating the impact of the agency's efforts from the many and varied determinants of U.S. export activity and (2) the long time frames between some TDA activities and any resulting export sales.

Although reliable data on foreign governments' major development project programs were difficult to obtain, we present the available data in chapter 4. Comparing data across countries should be done cautiously, due to varying data sources and categories.

We did our work from November 1991 through September 1993 in accordance with generally accepted government auditing standards.

On August 3, 1993, we discussed the contents of this report with officials from TDA, including the Acting Director. TDA generally agreed with the report's overall message and conclusions. We made some technical changes to the report on the basis of TDA's comments.

 $^{^{13}{\}rm OECD}$ is a forum for monitoring economic trends and coordinating economic policy among its 24 member countries, which include the economically developed free market democracies of North America, Western Europe, and the Pacific.

TDA has indicated that many U.S. firms that have participated in its project planning activities have since won a variety of contracts and generated U.S. exports. TDA has also reported that from 1982 through 1992, its project planning activities helped U.S. firms generate \$3.8 billion in U.S. exports, for a return in exports of \$25 for each \$1 of assistance provided by the agency. However, figures show that most TDA-supported major development projects have not yet produced U.S. exports, and others have produced fewer U.S. exports than TDA's original assessment of export potential. Although we verified some of the company-provided export data, we could not determine if these exports would have occurred without TDA's project planning activities.

TDA says that it is difficult to predict export potential. However, TDA officials believe that active projects could still produce over \$19 billion in future exports. The agency has taken steps to improve its data gathering, project monitoring, and program evaluation.

Many U.S. Firms Participate in TDA's Project Planning Activities

According to TDA, since the agency's inception, over 850 U.S. companies have participated in its project planning activities. In addition, its planning activities have benefited U.S. firms by helping them to participate in overseas development projects and by generating some exports. These firms have performed TDA-funded activities; have obtained contracts for follow-on work, such as architectural and engineering design work or project management; and have done "spin-off" work on unrelated projects, according to agency documents. Further, some firms have also stated that as a result of performing TDA-funded studies, they have expanded their domestic operations and established a permanent presence overseas.

A few TDA-provided examples of some U.S. firms that have benefited from its activities follow.

- In 1990, TDA provided a \$115,000 grant to a U.S. firm to conduct a joint
 feasibility study with an Indian company. A representative of the U.S. firm
 said that as a direct result of the feasibility study, his company had
 exported over \$10 million in equipment to the project. Furthermore, based
 on this experience, the company obtained similar work in another country.
- In 1988, TDA provided \$21,000 for Togolese officials to visit U.S. telecommunications firms and learn about new technologies in this industry sector. According to TDA officials, the agency's efforts led to the sale of \$600,000 in U.S. telecommunications equipment to Togo. Officials

say that the potential exists for an additional \$4 million in U.S. exports on this project.

- In 1989, a U.S. firm performed a TDA-funded feasibility study in Trinidad and Tobago that was partially funded by TDA. According to a company official, this was the first time his firm had performed work outside the United States. The official added that work on the TDA feasibility study led to spin-off contracts in several other foreign markets. As a result, the company has expanded its operations and hired 33 new employees to handle overseas contracts. It now earns 22 percent of its income from international work.
- In 1986, the African country of Côte d'Ivoire used a \$250,000 TDA grant to fund a feasibility study of the country's rural telecommunications network. After the feasibility study, Côte d'Ivoire retained the U.S. firm to do the detailed design work for the new system. In October 1992, the same U.S. firm signed a \$36-million contract to upgrade and expand Côte d'Ivoire's television and telecommunications network. The company also signed a second agreement to advise the country on future telecommunications development. This agreement could lead to additional contracts on other telecommunications projects.
- In the early 1980s, TDA provided a \$120,000 grant to the Government of Thailand for a feasibility study of an electricity transmission project. The U.S. contractor that performed the study also won several other contracts on the project. Through 1991, total U.S. exports associated with this project have exceeded \$35 million.

Finally, TDA believes that its feasibility studies increase the competitiveness of U.S. companies trying to get contracts during other phases of a project's development. For example, TDA reported that in 1989, the agency funded a feasibility study for a water project in Venezuela. After completing the study, the U.S. engineering firm won another contract to provide engineering services on the same project. As of December 1991, the project had generated \$27 million in U.S. exports, including various types of trucks and earth-moving equipment.

Most TDA-Supported Major Development Projects Have Yet to Produce U.S. Exports Although some TDA-supported major development projects have produced U.S. exports, most have not yet produced any, and others have produced less than TDA's original assessment of export potential. From 1982 through 1991, TDA obligated \$189 million to support 682 separate major development projects, including 72 projects with ongoing feasibility studies as of December 1992. The agency believes that future exports of U.S. goods and services from these projects could exceed \$19 billion. As of December 1992, some of these projects generated \$3.8 billion in exports. However, most of these projects had yet to produce any U.S. exports. Table 2.1 shows that of the 610 major development projects with completed feasibility studies, 429, or 70 percent, of the projects have not yet produced U.S. exports; only 10, or 1.6 percent, produced exports over \$100 million.

TDA officials emphasize that a key reason why many projects have not yet produced exports is that it often takes more than 5 years for TDA-supported projects to be implemented. These officials explained that while TDA has been funding project planning activities for over 10 years, as of 1992, over 60 percent of total obligations had occurred between 1988 and 1992.

Table 2.1: TDA-Funded Completed Projects Associated With Exports, Fiscal Years 1982-91

Exports generated	Number of projects	Percent of projects ^a
No exports	429	70.0
Under \$1 million	38	6.2
\$1 million to less than \$5 million	51	8.4
\$5 million to less than \$10 million	27	4.4
\$10 million to less than \$50 million	48	7.9
\$50 million to less than \$100 million	7	1.1
\$100 million or more	10	1.6
Total	610	100.0

^aPercentages do not add to total due to rounding.

Source: Complied from TDA data.

¹TDA's total program spending for this period was \$194.5 million. However, we agreed with TDA to use \$189 million because agency officials said that TDA used \$5.2 million to fund 203 definitional missions (prefeasibility studies) that did not lead to feasibility studies and \$0.3 million for grants to state and other local entities.

²The 682 major development projects do not include the 203 definitional missions that agency officials said did not lead to feasibility studies.

Beyond meeting the previously noted funding criteria, TDA's guidelines state that for project selection purposes, projects should also have the potential to generate \$50 to \$100 in export dollars for each \$1 of assistance provided by TDA. For fiscal years 1982-92, some individual projects exceeded the agency's goal, but the average return in exports as of December 1992 for projects funded between 1982 and 1992 was \$25 per \$1 of assistance provided by TDA.³

Of the 181 projects that had generated exports, TDA documents showed that 8 projects had accounted for a total of \$1.5 billion of the \$3.8 billion in exports that TDA reported through 1992. We contacted companies involved in these eight TDA-supported projects, and they verified that they had reported these exports. However, we were not able to determine whether these exports would have occurred without TDA's project planning activities. Further, we did not assess the methodology that companies had used to determine the exports generated by projects.

Export Information Difficult to Obtain

According to TDA officials, it is difficult to estimate potential exports and to determine actual exports. Although TDA derives the initial export potential of a project from the definitional and feasibility studies, TDA must rely on various sources to forecast the export potential of projects as they progress. These sources include officials from U.S. companies, banks, government organizations, and host governments. After a feasibility study, a TDA contractor revises the forecasted export potential by periodically contacting U.S. companies involved in TDA activities. ⁵ However, sometimes companies can only provide a broad estimate or range of a project's export potential. The contractor then uses a midpoint to forecast future exports. In other cases, the forecast reflects adjustments suggested by TDA officials. Also, different sources often will provide different forecasts for the same project. According to the contractor, estimates are as realistic and conservative as possible. However, for a given project, they may be the same, higher, or lower than a previous year due to changing conditions.

³To determine that TDA's activities returned \$25 in exports (using TDA-provided information) for \$1 invested (\$3.8 billion/\$154 million), we reduced the agency's obligations of \$189 million by an additional \$34.9 million—expenditures for 72 feasibility studies that had not been completed as of December 1992.

^{*}The \$1.5 billion includes \$42.9 million in exports that TDA counted in anticipation of a contract being signed.

⁵TDA uses a part-time contractor to monitor TDA-supported projects. This activity includes periodically revising the export potential, identifying actual exports, and developing an annual report that summarizes the activities of each project.

TDA defines "exports" as the sale of goods made in the United States, or services using U.S. workers. However, it is difficult for TDA to identify some service exports. For example, a TDA contractor said that it is often hard to identify service exports because U.S. firms may use both U.S. and foreign workers. Further, TDA reported that some suppliers were U.S. owned when sales were made but have subsequently become foreign owned. However, TDA officials said that they try not to count goods and services that are supplied by foreign-based offices or subsidiaries of U.S. corporations. As for counting exports, the agency's general principle is to count exports only after goods have left the United States or a legal obligation for sale has occurred.

Information on actual exports is also difficult to obtain because it comes from a wider variety of sources. For example, there may be several different companies supplying goods and services to the same project, some of which are not U.S. firms. In addition, some companies are reluctant to provide export information, while others can only provide estimates.

However, TDA officials believe that projects funded through 1992 still have the potential to produce over \$19 billion in U.S. exports. They explained that although projects may produce some exports during the early phases of project development, many equipment sales come in later years. For example, in 1981 TDA funded a feasibility study for a project in the Philippines. Early success led to \$113 million in U.S. exports. However, there was new activity associated with the project in 1988 that led to an additional \$220 million in exports. Officials emphasized that it may take 10 years or more to fully implement major development projects.

Some U.S. government and private sectors officials believe that some TDA-funded activities are successful even if they do not directly produce exports. For example, technical conferences may not always produce direct exports, but they serve as a forum where exporters can establish contacts that may lead to major contracts. In addition, orientation visits may help establish relationships necessary to conduct business in some countries. According to the US&FCS Commercial Counselor in Bangkok, business relationships can be important in obtaining contracts where there is only a small cost differential between contract proposals.

In addition, from 1987 through 1992, TDA provided \$8.6 million in grants to multilateral development banks, including \$6.1 million to the World Bank to promote U.S. goods and services. In 1991, for example, the World Bank

spent \$100 million on consultants, \$24 million of which came from one of the various World Bank trust funds to complement the bank's own budget for major development project studies and preparation. TDA believes that by getting U.S. firms involved in the initial project planning phases, these firms will develop a better understanding of how multilateral development banks approach major development projects. In addition, TDA also thinks that if U.S. firms help plan projects, they may have an opportunity to influence the development of specifications. However, TDA has had difficulties identifying exports that may have occurred as a result of its grants. These grants were used to fund U.S. consultants who undertook preliminary appraisals of projects to be financed by multilateral institutions. Further, we were unable to determine if these grants had any impact on increased U.S. exports.

TDA Taking Steps to Address Most Concerns

TDA officials have realized for several years that TDA needed to improve certain management functions. These functions include data gathering and project monitoring beyond the feasibility phase, evaluating project planning activities, and distributing project-related information to the business community. To begin addressing these concerns, TDA developed a strategic planning process in 1989. As part of this process, TDA revised its procedures for gathering information and monitoring project activities after the feasibility study, hired an economist/evaluator, selected a commercial audit firm to conduct financial and program audits, and broadened the distribution of project-related information.

Enhanced Data-Gathering Activities

In the past, TDA did not routinely gather information on and monitor developments in some projects beyond the feasibility phase. Until recently, the agency primarily focused on monitoring projects to identify exports. As a result, TDA was unable to establish a link between its activities and some of the exports that it claimed to have helped generate. Further, TDA could not provide information to exporters on some upcoming construction contracts and procurement for development projects overseas. Although several U.S. government organizations have been supporting TDA overseas, the agency has no agreements with these organizations to report on project activities beyond the feasibility phase. One TDA official said that US&FCS has provided information on some projects but has not done so comprehensively.

Recently, TDA began placing more emphasis on these issues. The agency has now hired and dedicated additional staff to gather and analyze data. It

also requires contractors and host governments to continue providing information on the status of projects and likely procurements after the feasibility study. Contractors must provide this information for 2 years. If the contractor receives follow-on work, the information requirement continues throughout the contractor's involvement in the project. In addition, the host government must provide information about the project for 5 years following the feasibility study.

More Frequent Audits

Before 1992, TDA relied mainly on its individual managers to follow established procedures and to identify and correct problems. However, TDA is taking steps to obtain independent evaluations of management and program activities. In 1992, the agency began implementing a 5-year audit plan. TDA selected a commercial audit firm to review its financial reports and accounting systems, as well as certain program activities. The Jobs Through Exports Act of 1992 requires TDA to have an independent financial and compliance audit annually. Also in 1992, the agency reviewed and made changes to its contractor selection process by placing more emphasis on the contractor's technical ability and project development experience.

Other Information-Disseminating Activities

Finally, to broaden the distribution of information to the U.S. business community, TDA publishes a biweekly newsletter to inform U.S. companies about its activities. The publication describes the status of active TDA projects, upcoming feasibility studies, and other activities. Dissemination occurs through several sources, including the National Association of State Development Agencies, DOC, and the Small Business Administration's district offices.

TDA is limited by certain factors in its ability to help companies generate exports. These factors include (1) TDA's indirect and limited role in the major development project process, such as its previous involvement only in the feasibility rather than the architectural and engineering design phase; and (2) factors beyond TDA's control, such as foreign government-supported competition. Also, political and changing international market conditions may cause host governments to delay, restructure, or abandon TDA-funded projects. In these instances, TDA has no control over project outcomes. In addition, the success of TDA's effort to help generate exports is dependent, in part, on services provided by other U.S. government organizations. These services include overseas representation and support by DOC, export financing by Eximbank, and activities offered by such organizations as DOE and the Environmental Protection Agency (EPA).

Factors That Hinder TDA's Ability to Further Exports

Many factors hamper TDA's ability to help increase U.S. exports. Chief among these factors is the limited and indirect role that the agency plays in the long and complex process of project development. TDA's primary project planning activity, the feasibility study, generally represents less than 3 percent of the total project cost and only initiates a process that could take many years to produce U.S. exports. For example, after the feasibility study, the host country could take from 2 to 10 years to finance and begin constructing a project. In addition, several more years may pass before a project realizes its full export impact. Furthermore, because TDA's activities occur early in the development process, the agency is not involved in purchasing decisions made in later phases of the project's development.

Some factors that affect the generation of U.S. exports are beyond the agency's control because they also occur after TDA's involvement. For example, U.S. companies may not obtain contracts to perform work during later phases of the project's development due to foreign government-supported competition. This type of competition varies but usually involves government-assisted financing. This practice, according to a 1992 AID report, may bolster the chances that foreign firms, rather than U.S. firms, will win contracts for major projects. Moreover, this pattern of "country-company" collaboration may inhibit some U.S. firms from even preparing bids. Table 3.1 shows examples of TDA-supported projects that were lost to foreign competition.

¹Trade and Investment Strategies for Emerging Markets, AID (Washington, D.C.: 1992).

Table 3.1: Examp	les of TDA	-Supported	Projects I	Lost to I	Foreign	Competition
I WALL ALL MARKET	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,					~~:::p~:::

		Estimated U.S.		Actual
Country/TDA project	Year	exports lost	Reason projects were lost	U.S. exports
China/oil field	1993	\$250	Subsidized financing by foreign government	\$7°
India/refinery	1993	143	Foreign company offered more attractive financing	t
China/airport	1991	50	Subsidized financing by foreign government	80
Honduras/water project	1988	45	U.S. firm could not obtain competitive financing	0
Philippines/hazardous waste plant	1993	39	Foreign government has offered to provide financing in conjunction with a multilateral development bank	0

^aA U.S. company won two small contracts that led to \$7 million in exports.

Source: TDA.

In addition, changes in international conditions may cause host governments to delay, restructure, or abandon TDA-funded projects. Host governments may also downsize projects when faced with financial constraints or pressures to increase the use of domestic resources.

Services Provided by Other U.S. Organizations Help Generate Exports

Dollare in millione

TDA's success in helping U.S. companies generate exports depends on services provided by other U.S. government organizations during the project development process. These services include, among others, operational support overseas, export financing programs, information dissemination, and other specialized assistance. According to TDA officials, TDA actively cooperates with other agencies to promote U.S. exports. However, because these agencies operate largely independently of each other, exporters that need assistance often must contact different federal agencies to get the support they need.

TDA Relies on DOC for Operational Support Overseas

US&FCS support is important to TDA's field-level activities because TDA has no overseas staff. US&FCS support to TDA includes establishing and maintaining relationships with host government officials and U.S. business

^bThe United States may receive about \$6 million from fees for technology licensing and engineering services provided by U.S. firms.

[&]quot;The \$8 million resulted from several small contracts won by U.S. companies.

representatives, and identifying potential projects. US&FCS also gathers information to help TDA determine if proposed projects meet the agency's grant-funding criteria. Although US&FCS support is critical to the TDA's program, TDA does not reimburse US&FCS for its assistance. According to TDA, US&FCS has been willing to provide these services without reimbursement because the services enhance US&FCS' presence with host government and business officials.

US&FCS officials in the three Asian countries we visited—India, Indonesia, and Thailand—said that constraints on their resources have made it difficult to continue supporting TDA at adequate levels. According to a US&FCS document, a US&FCS official and a foreign service national² devote about 15 percent of their time to TDA-related activities in Thailand. Also, a US&FCS official in New Delhi estimated that a foreign service national devotes 50 percent of his time to supporting TDA activities in India. TDA officials stated that the agency places a high value on TDA/US&FCS cooperation and recognizes that this relationship has permitted TDA to operate without overseas offices at considerable savings to the U.S. government. Officials further noted that restricted US&FCS budgets have make it difficult for US&FCS to meet all the demands placed on it. The Department of State assists TDA overseas in countries where US&FCS has no presence.

DOC also provides direct assistance to U.S. firms interested in major development projects overseas. For example, its International Trade Administration's Office of Energy, Environment and Infrastructure identifies upcoming major development projects and procurements, monitors developments in specific industrial sectors, and provides counseling on contract-bidding procedures and strategies.

Eximbank Is Primary Source of Export Funding

As the U.S. government's primary export credit agency, Eximbank is responsible for aiding the export of U.S. goods and services through a variety of loan guarantee and insurance programs. One such program, the Engineering Multiplier Program, provides loans or loan guarantees for feasibility studies and architectural and engineering design services. It also provides support for operation and maintenance contracts. Further, Eximbank offers a program to encourage regional commercial banks to

²The United States employs foreign nationals as commercial specialists who are called "foreign service nationals."

become involved in international projects. Eximbank also employs a "war chest" fund to match other countries' offers of tied aid.³

Because Eximbank is a major source of financing for U.S. exporters, TDA has taken several steps to help increase loan approvals for TDA-supported projects. For example, TDA officials said that they consult with Eximbank on most feasibility studies, require U.S. companies conducting feasibility studies to address Eximbank requirements for project financing, and have discussed ways to facilitate Eximbank's loan application process. Neither TDA nor Eximbank know what the loan approval rate has been for TDA-related projects. According to the Eximbank's Vice President of Engineering, the two agencies consult informally on various issues. However, at the time when TDA decides to fund a feasibility study, Eximbank is not able to make preliminary commitments to fund the project. At that stage, Eximbank will only confirm that it provides loans in a particular country and industry sector.

AID Has Several Programs to Assist Exporters in Competing for Major Projects

AID manages the U.S. foreign assistance program and funds a range of programs and activities that could help U.S. exporters. During the 1960s, a substantial portion of AID's budget went to loan programs to support private and public sector investment in developing economies. Most of this money supported major capital projects that, in addition to facilitating economic development, provided substantial direct trade benefits to U.S. companies. During the 1970s, under the "New Directions" legislation, AID increased its focus on addressing "basic human needs" by working through recipient governments to directly alleviate human suffering. Because of this policy, capital projects were deemphasized, and AID began shifting its resources away from large infrastructure projects to small-scale, rural projects that focus on agricultural production, nutrition, health, and education.⁴

In 1981, AID announced a Private Enterprise Initiative intended to focus AID's efforts on two complementary goals: encouraging developing countries to increase their reliance on competitive markets as a means of meeting basic human needs, and facilitating the growth of private businesses. Reorienting AID's efforts in this manner was acknowledged to

³"Tied aid" refers to foreign assistance that is linked to the purchase of exports from the country extending the assistance. U.S. trade policy has generally been to discourage the use of tied aid by the United States and its competitors. GAO is currently reviewing the tied aid policies and practices of the United States and its major competitors.

⁴Foreign Assistance: A Profile of the Agency for International Development (GAO/NSIAD-92-148, Apr. 3, 1992).

require a substantial change in the agency, which had spent the 1970s developing expertise in working with indigenous governments to address basic human needs, and a Bureau for Private Enterprise was created to provide a focal point for the agency's new efforts. Funding for capital projects continued to decline (falling to about \$551 million in 1991—about 50 percent of the 1984 level) and remained concentrated in a handful of locations.⁵

Although AID's investment in major projects has declined in recent years, AID reported in 1990 that active capital projects under its management totaled over \$5.5 billion. AID has been unable to quantify the impact that these projects have had on increased U.S. exports. These projects include

- a \$500-million joint Eximbank/AID program to finance projects in the Philippines, Thailand, Pakistan, and Indonesia;
- \$350 million for projects in Egypt; and
- \$160 million for additional projects in the Philippines.

In 1992, the Aid, Trade, and Competitiveness Act (P.L. 102-549) directed AID to establish a capital project office to focus not only on the development needs of host countries but also on the export opportunities for the United States. Congress has yet to provide funds for the program. In 1992, AID also established the Center for Trade and Investment Services, AID's "one-stop shop" to provide trade and investment information and support services to the U.S. business community. These services include providing information on business and investment opportunities not covered by DOC, according to a 1992 AID document.

TDA officials said that coordination with AID occurs on specific issues, but the two agencies usually focus on different types of development activities. TDA emphasizes capital development activities that have greater potential to produce exports. TDA officials said that the two agencies have coordinated orientation visits and technical conferences, and have discussed ways to avoid the duplication of some activities. Also, the agencies have co-funded two feasibility studies in India. TDA also relies on the resources as well as the expertise of various other federal agencies. These organizations include DOE, EPA, and the Department of Transportation. TDA will provide the funding for a specific planning activity, and another federal agency will contribute expertise, such as

⁵Foreign Assistance: AID's Private-Sector Assistance Program at a Crossroad (GAO/NSIAD-93-55, Dec. 11, 1992).

technology, research, training, and program management, according to TDA.

Fragmented Approach by U.S. Agencies Limits Quality of Service to Exporters

Because U.S. organizations take a fragmented approach to major development projects, firms that need assistance often must contact several different federal agencies to get the support they need. This system can be confusing and discouraging to exporters. For example, on a typical major development project, a company may have to contact the following agencies for assistance:

- TDA for potential trade opportunities and project planning activities, including feasibility studies and other technical assistance;
- Eximbank for the financing of goods and services, including architectural and engineering design studies;
- DOC for trade opportunities and counseling on bid procedures and strategies for major development projects;
- · AID for trade opportunities and a range of project planning activities; and
- DOE and EPA for more specialized assistance, including training and technical conferences.

The U.S. government is trying to improve the fragmented approach of its export promotion programs, including the export of goods and services to developing countries. For example, in May 1990, the President established the Trade Promotion Coordinating Committee (TPCC) to unify and streamline U.S. government trade promotion programs. Many federal organizations participate in this interagency committee's activities. Chaired by the Secretary of Commerce, TPCC has established working groups for specific activities; export facilitation and conferences for the U.S. business community; and a trade information center to provide information on federal assistance available to exporters.

Congress passed the Export Enhancement Act of 1992 (P.L. 102-429) to strengthen the effort to bring coherence to the government's export promotion programs by providing a statutory basis for TPCC, thereby making it permanent. Furthermore, the act incorporated GAO's suggestions, requiring TPCC to develop and carry out a governmentwide strategic plan for federal trade promotion efforts. It also proposed that the President provide an annual unified federal budget for export promotion that would be consistent with priorities established in the strategic plan. ⁶ Because TDA

⁶Export Promotion: Federal Programs Lack Organizational and Funding Cohesiveness (GAO/NSIAD-92-49, Jan. 10, 1992).

promotes the export of U.S. goods and services to developing countries and plays an important role in the U.S. approach to major development projects, it will probably be affected by the 1992 act. TPCC recently completed a governmentwide strategic plan for federal export promotion programs. GAO plans to examine the adequacy of this plan.

TDA Expands Scope of Feasibility Studies

TDA believes that its current strategy effectively contributes to increased exports by U.S. companies. However, TDA is expanding the scope of some of the feasibility studies it is funding. Some U.S. government officials and industry representatives believe that TDA could help U.S. firms generate more exports if the agency expanded its project planning activities to include the architectural and engineering design phase. As previously noted, it is during this phase that engineers develop process requirements, procurement procedures, and equipment specifications. These activities may favor specific technology, especially in projects where technical expertise is vital, such as power plants and telecommunications projects. Therefore, TDA has began funding some elements of the architectural and engineering design phase.

According to a former TDA director, were TDA to fund or partially fund design studies, U.S. firms would be in a better position to develop specifications that may lead to the use of more U.S. goods and services in later phases of the project's development. In addition, an Eximbank official told us that a TDA grant, combined with the U.S. company's money, may allow the company to submit a more competitive bid for design work.

According to some industry representatives, it is important for TDA to fund engineering design studies because most projects that reach the design phase will generally proceed to the construction and procurement phase. One representative added that because of limited resources, some developing countries are seeking grants instead of loans to fund architectural and engineering design studies. Thus, a U.S. engineering firm that does the feasibility study could lose a potential design contract because a foreign firm may receive a grant from its government that lowers the contract bid, thus helping the firm to receive the contract.

Although some host governments have requested grants from TDA to fund design studies, the agency has been reluctant to fund these studies because they are more expensive than feasibility studies, as shown in table 3.2. TDA's limited budget could be quickly exhausted on a relatively small number of projects. TDA officials also pointed out that the agency's current

strategy allows TDA to fund more feasibility studies and to spread its financial risk while enabling more U.S. firms to enter new markets. Since its inception, TDA has allocated about 75 percent of total program spending to fund feasibility studies.

Table 3.2: Cost Range of Major Development Project Phases as a Percent of Total Project Cost

Project phase	Cost range (percent)
Prefeasibility and feasibility	1 to 2
Architectural and engineering design	5 to 10
Construction and procurement	85 to 95
Start-up, operation, and maintenance	0 to 5

Source: The Feasibility of Using Credit to Finance Capital Projects, AID Bureau for Private Enterprise (Washington, D.C.: May 11, 1992).

Information Lacking to Show That Design Activities Lead to More Exports

TDA has begun to incorporate some elements of the architectural and engineering design phase into some feasibility studies. For example, TDA officials said that in 1990, the agency provided \$2 million to Poland as part of a \$2.4-million contract to fund a joint U.S.-Polish feasibility study. The study was to evaluate the rehabilitation of seven coal-fired power plants. Because the size of the contract was larger than most TDA grants, the scope of the effort also exceeded most TDA-funded feasibility studies. The study involved detailed investigations of the power plants and recommendations for the systems' rehabilitation. Further, in 1992, TDA provided a grant of \$500,000 to Mexico City for a feasibility study of a hazardous waste facility that included some design elements. The study included (1) the development of a financial strategy for carrying out the project; (2) the preliminary design and performance specifications of the proposed system; and (3) the location, selection, and evaluation of the site. It also identified process and technology options for many components of the proposed plant.

TDA plans to continue funding architectural and engineering work that assists managers of host country projects to specify the equipment, services, and technologies needed to construct the project, according to agency officials. TDA believes that its new efforts will allow U.S. firms to participate in the development of detailed design specifications, which could lead to increased U.S. exports.

Five Other Countries Take a More Strategic Approach to Funding Major Development Projects

The United States and the five other countries we studied—France, Germany, Italy, Japan, and the United Kingdom—give billions of dollars of foreign assistance funds to developing countries. This assistance covers a broad range of programs, including major development projects. Overall, the U.S. approach to major development projects differs in several key respects from the approach taken by these countries. In comparison to the United States, these countries use more of their foreign aid resources to fund major development projects both in relative and absolute terms. We believe that most of the countries we studied also better integrate the organizations and activities involved to enhance the projects' commercial benefits. In addition, to ensure they realize commercial benefits, these countries generally require that some of their assistance go toward foreign countries' purchases of equipment from the grantor country ("tied aid").

Countries' Funding for Foreign Assistance Is Substantial

The United States and the five industrialized countries that we studied spend substantial amounts on foreign aid. This aid is generally categorized as either "bilateral" or "multilateral." Bilateral aid is provided directly from donors to recipient countries. This aid includes funds for major development projects. Multilateral aid is funneled to recipient countries through the European Community and international institutions such as the United Nations and the World Bank.

Table 4.1 lists the world's six largest aid donors. The table also shows that bilateral assistance represents the greatest portion of these countries' foreign assistance programs.

Table 4.1: Six Countries' Foreign Aid Spending, 1991

Country	Bilateral aid	Multilateral aid	Total
United States	\$9,396	\$1,866	\$11,262
Japan	8,860	2,092	10,952
France	5,816	1,668	7,484
Germany	4,575	2,315	6,890
Italy	2,245	1,107	3,352
United Kingdom	1,818	1,430	3,248

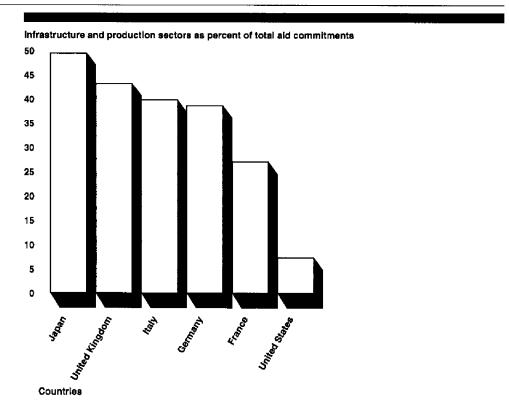
Source: Compiled from OECD data.

Other Countries Allocate More Foreign Assistance to Major Development Projects

Although the United States is one of the world's largest donors of foreign assistance, the other five countries provide absolutely and proportionately more foreign aid on a percentage basis for major development projects than does the United States.

Data reported to OECD reveal that major development projects play a larger role in the economic development strategies of these five countries than in the United States. Figure 4.1 shows that in 1991, the six countries we studied spent between 7 and 49 percent of their total bilateral aid on economic infrastructure and production sectors. These sectors are largely comprised of major development projects. The United States spent proportionately the least—just over 7 percent of total bilateral aid—and Japan spent the most—49 percent.

Figure 4.1: Six Countries' Bilateral Aid for Economic Infrastructure and Production Sectors, 1990



Note 1: Economic infrastructure and production sectors include transportation, communications, energy, industry, mining, construction, and others.

Note 2: Data for 1991 were not available.

Source: OECD.

The differences remain even when making a comparison based on actual expenditures rather than just relative shares. Table 4.2 shows that in 1991, the U.S.' total spending in areas that are largely comprised of major development projects was the lowest of the six industrialized countries we studied. Japan led with \$5.7 billion in spending, followed by Germany with \$1.4 billion; Italy with \$1.1 billion; France with \$882 million; and the United Kingdom with \$842 million. The United States spent the least—\$658 million.

ł

Table 4.2: Six Countries' Bilateral Spending on Major Development Projects by Key Industry Sectors, 1991

- 1	. ~				1411	
	· .	dal	Orc.	ın	millions	٠.

Country	Transportation	Communications	Energy	Industry/mining/ construction	Total
Japan	\$2,714	\$610	\$1,960	\$435	\$5,719
Germany	750	40	505	143	1,438
Italy	176	80	565	290	1,111
France	303	219	222	138	882
United Kingdom	193	7	487	155	842
United States	232	31	308	87	658

Note: The totals in this table do not include all the sectors that are reported to OECD.

Source: Complied from OECD and AID data.

The relatively low level of U.S. spending on major development projects reflects a deliberate policy decision made in the early 1970s. As previously stated, in 1973, the U.S. government deemphasized major development projects as part of its developmental aid program in favor of humanitarian aid to meet basic human needs.

Other Countries Use a More Integrated, Proactive Approach to Major Development Projects

The other countries that we studied each approach major development project assistance differently. Unlike the United States, most of the other five countries we studied use a more integrated organizational approach to enhance the commercial benefits derived from the projects. We believe that this situation is largely a reflection of the greater overall importance these countries attach to capital project assistance. Organizationally, the countries we studied centralize their major development project programs among fewer agencies than does the United States, or they use various means to coordinate the inputs of the different agencies involved in planning major development projects.

The U.S. Approach to Major Development Projects Is Fragmented

As previously stated, the U.S. approach to major development projects is fragmented among several executive branch agencies. Furthermore, the level of support and the type of activities that each agency contributes are not based on an overall major development project program strategy or set of priorities. For example, TDA, AID, DOC, DOE, EPA, and Eximbank are all involved to varying degrees in planning and carrying out major development projects.

Other Countries Are More Organizationally Integrated

Unlike the United States, most of the other countries we studied have organizationally integrated their governments' capital project assistance programs to ensure that projects satisfy both developmental and commercial objectives.

In Germany, a single agency oversees major development projects. The Federal Ministry of Economic Cooperation directs the German development assistance program. The ministry is assisted by the Reconstruction Loan Corporation and the German Agency for Technical Cooperation. The corporation assists the ministry in project identification and makes loans and manages capital project planning and implementation on the government's behalf. The German Agency for Technical Cooperation provides technical assistance, including training.

In Italy, a formal government committee manages foreign assistance for major development projects. The Ministry of Foreign Affairs, with the Ministries of Finance, External Trade, and Budget, jointly develops aid policy, including assistance for major development projects, through a formal Interministerial Committee on Development Cooperation. The Ministry of Foreign Affairs handles negotiations with recipient countries and prepares project plans, which are forwarded for approval by the interministerial committee. The committee meets 4 times a year to review and approve projects.

The Japanese government involves its major trade and development organizations in the decision-making process for development projects, emphasizing the link between commercial and development interests. The Ministry of Foreign Affairs, in conjunction with the Ministries of Finance, International Trade and Industry, and the Economic Planning Agency, formulates development assistance policy. In addition, these ministries jointly approve all development assistance loans, including those for major development projects, under the guidance of the Ministry of Foreign Affairs. Furthermore, the Overseas Economic Cooperation Fund provides project lending support, and the Japan International Cooperation Agency provides technical and other grant assistance.

Moreover, the Japanese government offers companies complete export assistance packages—including feasibility studies, architectural and engineering design, training, and financing. These packages are coordinated among Japan's International Cooperation Agency, the Overseas Economic Cooperation Fund, and the Export-Import Bank of Japan. Japanese embassies coordinate and monitor these export

ğ

E. 1 May 1

assistance programs in each country, with final approval from officials in Tokyo. In 1991, the Overseas Economic Cooperation Fund reported that about 33 percent of its projects in Indonesia and 30 percent of its projects worldwide were based on feasibility studies funded by Japan's International Cooperation Agency.

The United Kingdom uses a committee to manage its major capital project activities. Members of the committee include representatives of the United Kingdom's trade and development agencies—the Department of Trade and Industry and the Overseas Development Administration. Organizationally, the British have established a special program, the Aid and Trade Provision (ATP), to match offers of tied aid from other countries. However, unlike the U.S. approach to tied aid matching, ATP is managed by the Special Committee on Aid and Trade. The committee consists of the Department of Trade and Industry, the Overseas Development Administration, Her Majesty's Treasury, the Bank of England, the Export Credit and Guarantees Department, and the Foreign and Commonwealth Office. The British approach allows for both trade and developmental considerations to be systematically factored into the decision-making process for major development projects.

Other Countries Use More Proactive Strategies to Foster Commercial Benefits

To further advance the commercial benefits gained from major development projects, the foreign countries we studied use a mix of formal planning approaches to guide their capital project assistance programs. These techniques differ from the U.S. approach, which is largely reactive and focused on matching other countries' offers of tied aid when foreign competition is present or suspected.

In the United States, companies must approach TDA for grants to conduct feasibility studies, AID for funds to finance training programs, and Eximbank for loans or loan guarantees for exports. In addition, as previously stated, Eximbank employs a war chest fund to outbid other countries' offers of tied aid, to prevent them from benefiting from the use of tied aid. In 1986, Congress authorized Eximbank to create this fund as a strategic means to deal with other countries that have relied strongly on tied aid to enhance their exports. However, Eximbank has been reluctant to use the war chest. For example, Eximbank has not exhausted the full amount of its authorized annual war chest funds in any year since the war chest's creation: it did not use the war chest at all in fiscal year 1989. Only in 1991 did Eximbank use

nearly all of its war chest authority. In 1992, Eximbank authorized one war chest transaction, for \$5.1 million.¹

The French government uses a formal planning approach by entering into bilateral agreements with the governments of certain beneficiary countries to fund major development projects. Usually, these agreements establish the aggregate amount and financing terms available to the recipient country for multiple projects.

ì

Unlike the French, the German government does not negotiate bilateral agreements with developing countries that identify specific major development projects. However, the German government annually allocates funds to individual developing countries. These funds can be used to finance future major development projects once the development needs of the recipient country are identified. The Ministry of Economic Cooperation allocates assistance funds for major development projects to specified countries on an annual basis. German government and recipient country officials jointly define the country's development needs and develop an annual aid package. Requests for German development cooperation are formally the responsibility of the developing country, but in practice, project proposals are often developed through joint consultations, according to an August 1992 World Bank review of Germany's national aid program. According to a ministry official, Germany does not generally fund projects in a reactive manner, that is, to match other countries' offers of project assistance.

Italy, like France, also uses formal agreements to identify and select major development projects. Although Italian companies play a role in identifying projects, Italian and recipient government officials jointly select projects during annual or biannual consultations with selected recipient countries. Officials discuss the recipient countries' development needs, examine the project proposals submitted by the countries, and jointly select those suitable to be included within the framework of the Italian 3-year development assistance program.

Japan uses a mix of strategies, including special administrative procedures, to enhance the commercial benefits of major development projects. For example, as noted in a May 1990 GAO report, the Japanese commonly tie project planning and administrative funds for major development projects to help ensure that much of the contracting for

Export Finance: The Role of the U.S. Export-Import Bank (GAO/GGD-93-39, Dec. 23, 1992).

project execution will go to Japanese firms.² This involvement in early project design is important because when Japanese companies design projects, procurement specifications tend to be ones that Japanese firms are best suited to fill. In addition, Japan has developed highly integrated commercial networks. These networks make it likely that firms related to those performing planning and administrative tasks will be in a good position to submit bids based on advance information. This practice has an effect on contract awards, though international competitive bidding procedures are officially used to solicit bids.

The United Kingdom matches offers of tied aid from other countries through its special ATP program. Under this program, British firms can apply for assistance from ATP when foreign competition is present or suspected. ATP provides assistance to British firms to match specific offers of aid already made by competitors and to match terms that may be offered by competitors. However, unlike the U.S.' TDA, ATP can assist firms to secure contracts even where there is no strong indication that other governments will offer aid support.

Other Countries Use Tied Aid to Bolster the Commercial Gains From Major Development Projects Other countries can give their exporters a competitive advantage over U.S. exporters to the extent that their programs for major development project assistance are tied to donor country purchases. Although the available data on aid tying are imprecise, other countries appear to have tied, either formally or informally, a significant percentage of their aid for major projects. While the United States ties substantial amounts of its agricultural and military aid to U.S. goods, it generally avoids using tied aid to promote the export of U.S. capital goods. The United States has also led international efforts to reduce aid tying on major development projects deemed commercially viable.

²Economic Assistance: Integration of Japanese Aid and Trade Policies (GAO/NSIAD-90-149, May 24, 1990).

Conclusions

Developing countries are important markets for U.S. products, and TDA's mission is to promote the export of U.S. goods and services to these countries. Between 1982 and 1991, TDA spent \$189 million to fund hundreds of project planning activities worldwide, but most of the major development projects that these activities supported have yet to generate exports. We believe that TDA's ability to help companies generate exports has important limitations. Furthermore, the approach that certain other industrialized countries take toward major development projects may give their exporters an advantage over U.S exporters.

}

Many factors inhibit TDA's ability to help advance U.S. exports. Among these factors, TDA has until recently played an indirect and limited role in the major development project process, i.e., TDA funded mostly initial feasibility studies rather than the architectural and engineering design studies. To expand its role in this process and try to help generate more U.S. exports, TDA has begun funding elements of the architectural and engineering design phase. TDA also plans to continue funding these activities when they assist managers of host country projects to specify the equipment, services, and technologies needed to construct the project. The agency believes that this new direction will complement its traditional focus on mostly funding feasibility studies and could lead to additional U.S. exports.

In contrast to the U.S. foreign assistance program, other countries' development assistance programs place greater emphasis on funding large development projects and tend to link a far greater share of their development assistance to the promotion of their own exports. As such, it is unrealistic to expect TDA—with an allocation of \$40 million annually, a staff of 31, and a dependence on the voluntary collaboration and assistance of numerous other agencies—to offset the advantages gained by other countries' exporters resulting from the nature of their aid programs. The U.S. approach to foreign assistance since the 1970s has been to deemphasize major development projects in favor of humanitarian aid and private enterprise development efforts. In addition, TDA's success in helping companies generate exports depends, in large part, on services provided by other U.S. government agencies; yet, the U.S. government's approach to major development projects has been fragmented among several executive branch agencies. Other countries, on the other hand, use a more integrated approach to major development projects.

It is important to note that lower U.S. emphasis on major development projects in favor of humanitarian aid and private enterprise development

Chapter 5 Conclusions

efforts has a clear development-based rationale. Assessing the merits of that strategy is beyond the scope of this study. Similarly, although it appears that a more integrated approach would be an important step toward helping firms compete in overseas markets, the scope of this review did not enable us to determine conclusively the most appropriate approach for the U.S. government to take toward major development projects. TPCC recently completed a governmentwide strategic plan for federal export promotion programs. In the future, we plan to examine the adequacy of this plan and review the merit of other countries' practices of tying aid to exports.

Major Contributors to This Report

General Government Division, Washington, D.C.	Virginia Hughes, Assistant Director Harry Tyner, Evaluator-in-Charge Laura Filipescu, Evaluator
European Office	Stephen Lord, Assignment Manager
Far East Office	Michael Rohrback, Site Senior Paula Haurilesko, Evaluator

1

Related GAO Products

Export Promotion: Initial Assessment of Governmentwide Strategic Plan (GAO/T-GGD-93-48, Sept. 29, 1993).

Export Promotion Strategic Plan: Will it Be a Vehicle for Change? (GAO/T-GGD-93-43, July 26, 1993).

Export Promotion: Governmentwide Strategy Needed for Federal Programs (GAO/T-GGD-93-7, Mar. 15, 1993).

Export Finance: The Role of the U.S. Export-Import Bank (GAO/GGD-93-39, Dec. 23, 1992).

Export Promotion: Federal Approach Is Fragmented (GAO/T-GGD-92-68, Aug. 10, 1992).

Export Promotion: A Comparison of Programs in Five Industrialized Nations (GAO/GGD-92-97, June 22, 1992).

Export Promotion: Overall U.S. Strategy Needed (GAO/T-GGD-92-40, May 20, 1992).

The U.S. Export-Import Bank: The Bank Plays an Important Role in Promoting Exports (GAO/T-GGD-92-36, May 6, 1992).

Export Promotion: Federal Programs Lack Organizational and Funding Cohesiveness (GAO/NSIAD-92-49, Jan. 10, 1992).

Ordering Information

The first copy of each GAO report and testimony is free. Additional copies are \$2 each. Orders should be sent to the following address, accompanied by a check or money order made out to the Superintendent of Documents, when necessary. Orders for 100 or more copies to be mailed to a single address are discounted 25 percent.

Orders by mail:

U.S. General Accounting Office P.O. Box 6015 Gaithersburg, MD 20884-6015

or visit:

Room 1000 700 4th St. NW (corner of 4th and G Sts. NW) U.S. General Accounting Office Washington, DC

Orders may also be placed by calling (202) 512-6000 or by using fax number (301) 258-4066.

United States General Accounting Office Washington, D.C. 20548

Official Business Penalty for Private Use \$300 First-Class Mail Postage & Fees Paid GAO Permit No. G100